

IN THE SPECIFICATION:

Please amend the Specification as follows.

[0049] Figure 6 shows an acceleration sensor, according to the present invention, implemented with two pairs of electrodes. In the Figure, in addition to the triangular movable electrodes 28-1 and 28-2, the axes of symmetry 31-1 and 31-2, the spring attachment points, the ~~axis~~ axes of rotation 30-1 and 30-2 and the outer wall of the sensor are indicated. By using multiple pairs of electrodes and by suitably selecting the points of support, an acceleration sensor with alternatively one or two axes can be implemented. In the Figure, an acceleration sensor with two axes has been implemented using two pairs of electrodes. The pairs of electrodes are positioned such, that two axis of symmetry are obtained. In the acceleration sensor according to the present invention, the center of gravity of each movable electrode and the length of the line segment between the centers of gravity must be shorter than the straight line drawn between any support points of the different movable electrodes.

[0050] Figure 7 shows an acceleration sensor, according to the present invention, implemented with three pairs of electrodes. In the Figure, in addition to the triangular movable electrodes 38-1, 38-2 and 38-3, the axes of symmetry 41-1, 41-2 and 41-3, the spring attachment points, the ~~axis~~ axes of rotation 40-1, 40-2 and 40-3 and the outer wall of the sensor are indicated. By using multiple pairs of electrodes and by suitably selecting the points of support, an acceleration sensor with alternatively one, two or

three axes can be implemented. In the Figure, an acceleration sensor with three axes has been implemented using three pairs of electrodes. The pairs of electrodes are positioned such, that three axis of symmetry are obtained. In the acceleration sensor according to the present invention, the positive direction is understood to be the direction from the support axis of the movable electrode towards the center of gravity, and the negative direction is understood to be the direction opposite to that. In the acceleration sensor according to the present invention, the pairs of electrodes are located in the sensor such, that the positive direction vector of each movable electrode is at an angle of 120° , and 240° in relation to the positive direction vector of the other two movable electrodes, and that the negative direction vectors of the movable electrodes intersect in essentially a single point.

[0051] Figure 8 shows an acceleration sensor, according to the present invention, implemented with four pairs of electrodes. In the Figure, in addition to the triangular movable electrodes 48-1, 48-2, 48-3 and 48-4, the axes of symmetry 51-1, 51-2, 51-3 and 51-4, the spring attachment points, the axis axes of rotation 50-1, 50-2, 50-3 and 50-4 and the outer wall of the sensor are indicated. By using multiple pairs of electrodes and by suitably selecting the points of support, an acceleration sensor with alternatively one, two or three axes can be implemented. In the Figure, an acceleration sensor with three axes has been implemented using four pairs of electrodes. The pairs of electrodes are positioned such, that four axis of symmetry are obtained. In the acceleration sensor

according to the present invention, the pairs of electrodes are located in the sensor such, that the positive direction vector of each movable electrode is at an angle of 90° , 180° , and 270° in relation to the positive direction vector of the other three movable electrodes, and that the negative direction vectors of the movable electrodes intersect in essentially a single point.

[0052] Figure 9 shows an acceleration sensor, according to the present invention, implemented with eight pairs of electrodes. In the Figure, in addition to the triangular movable electrodes 58-1, 58-2, 58-3, 58-4, 58-5, 58-6, 58-7 and 58-8, the axes of symmetry 61-1, 61-2, 61-3 and 61-4, the spring attachment points, the axis axes of rotation 60-1, 60-2, 60-3, 60-4, 60-5, 60-6, 60-7 and 60-8 and the outer wall of the sensor are indicated. By using multiple pairs of electrodes and by suitably selecting the points of support, an acceleration sensor with alternatively one, two or three axes can be implemented. In the Figure, an acceleration sensor with three axes has been implemented using eight pairs of electrodes. The pairs of electrodes are positioned such, that four axis of symmetry are obtained.

[0053] Different ranges of acceleration can be measured with the different pairs of electrodes of the acceleration sensor according to the present invention. Some pairs of electrodes of the acceleration sensor may also be redundant pairs of electrodes. In addition, some of the pairs of electrodes of the acceleration sensor can be used for linearisation of the capacitance change.

[0054] Figure 10 shows an alternative acceleration sensor, according to the present invention, implemented with four pairs of electrodes 68-1, 68-2, 68-3 and 68-4. In the Figure, in addition to the triangular movable electrodes, the axes of symmetry 71-1 and 71-2, and the axes of rotation 70-1, 70-2, 70-3 and 70-4 are indicated. In the alternative acceleration sensor according to the present invention the pairs of electrodes are located in the sensor such, that the positive direction vector of each movable electrode is at an angle of 90° , 180° , and 270° in relation to the positive direction vector of the other three movable electrodes, and that the negative direction vectors of the movable electrodes intersect in essentially a single point in the center of the assembly. The electrode planes and support points of the movable electrodes are symmetrical in relation to four axes of symmetry in the electrode plane.

[0055] Figure 11 shows a second alternative acceleration sensor, according to the present invention, implemented with four pairs of electrodes. In the Figure, in addition to the movable electrodes 78-1, 78-2, 78-3 and 78-4, the axes of symmetry 81-1 and 81-2, and the axes of rotation 80-1, 80-2, 80-3 and 80-4 are indicated. In the second alternative acceleration sensor according to the present invention, the pairs of electrodes are located in the sensor such, that the positive direction vector of each movable electrode is at an angle of 90° , 180° , and 270° in relation to the positive direction vector of the other three movable electrodes, and that the negative direction vectors of the movable electrodes intersect in essentially a single point in the center of the assembly.

The electrode planes and support points of the movable electrodes are symmetrical in relation to four axes of symmetry in the electrode plane.